DOCUMENT RESUME

ED 187 786 UD 020 538

AUTHOR Clark, Terry Nichols; Ferguson, Lorna C.
TITLE Fiscal Strain and American Cities: Six Basic Processes.
INSTITUTION Chicago Univ., Ill.; National Opinion Research Center, Chicago, Ill.
SPONS AGENCY National Inst. of Child Health and Human Development (NIH), Bethesda, Md.; Twentieth Century Fund, New York, N.Y.
PUB DATE 15 Sep 79
GRANT HD08916-03
NOTE 37p.; Revision of a paper presented at the Annual Meeting of the American Sociological Association (Chicago, IL, September 6, 1977). Not available in paper copy due to light print.

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Etiology; Financial Policy; *Financial Problems; *Socioeconomic Influences; Statistical Analysis; *Urban Problems
IDENTIFIERS New York (New York)

ABSTRACT

This paper addresses the causes of urban fiscal difficulty in American cities by outlining the dynamics of six distinct processes. These operate differentially in many American cities; together they converged to produce the acute difficulties in New York City. They are, nevertheless, distinct enough to consider separately both for analytical coherence and for policy intervention; the causes and solutions to each are distinguishable enough to warrant separate attention. The six processes are: (1) national trends; (2) attracting and keeping jobs; (3) the politicization of municipal employees; (4) the poor-redistribution cycle; (5) maintaining a non-poor population; and (6) maturing fiscal obligations. Beyond identifying multiple and distinct causes of fiscal problems, the paper also stresses variations in fiscal strain between cities and the role of the local, political leadership. The development of a multi-causal explanation facilitates this process of differentiating between cities. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

APR 15 1980

APR 07 1980

ED187786

FISCAL STRAIN AND AMERICAN CITIES:

SIX BASIC PROCESSES*

Terry Nichols Clark
Lorna C. Ferguson

National Opinion Research Center
and
The University of Chicago

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Terry Nichols Clark
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

*This is a revision of a paper presented at the annual meeting of the American Sociological Association, Chicago, September 6, 1977. It is an essentially conceptual statement completed as part of the Project on Urban Fiscal Strain. For comments we thank Ronald Burt, Reid Charles, Irene Rubin, Arthur Stinchcombe, and Erwin Zimmermann. Support was generously provided by the Twentieth Century Fund and USPHS, NICHD, HD08916-03.

UD020538

Revised September 15, 1979

FISCAL STRAIN AND AMERICAN CITIES:

SIX BASIC PROCESSES

ABSTRACT

This paper addresses the causes of urban fiscal difficulty in American cities by outlining the dynamics of six distinct processes. These operate differentially in many American cities; together they converged to produce the acute difficulties in New York City. They are nevertheless distinct enough to consider separately both for analytical coherence and for policy intervention; the causes and solutions to each are distinguishable enough to warrant separate attention. The six processes are (1) National Trends; (2) Attracting and Keeping Jobs; (3) The Politicization of Municipal Employees; (4) The Poor-Redistribution Cycle; (5) Maintaining a Non-Poor Population; and, (6) Maturing Fiscal Obligations. Beyond identifying multiple and distinct causes of fiscal problems, the paper also stresses variations in fiscal strain between cities, and the role of the local, political leadership. The development of a multi-causal explanation facilitates this process of differentiating between cities.

The fiscal difficulties of New York City since the spring of 1975 have stimulated considerable commentary and public debate. Much discussion remains cloudy, with ideology and special pleading often mingled with efforts to unravel the issues. And despite the billions involved, remarkably little scholarly analysis has been undertaken of New York City or more general urban fiscal difficulties. Passage of Proposition 13 by California voters in 1978 made explicit another dimension of the problem. Urban fiscal strain provides a strategic research site for analyses of community power, urban politics, and municipal finance.

This paper seeks to clarify the causes of urban fiscal difficulty in American cities by outlining the dynamics of six distinct processes. These operate differentially in many American cities; together they converged to produce the acute difficulties in New York City. They are nevertheless distinct enough to consider separately both for analytical coherence and for policy intervention; the causes and solutions to each are distinguishable enough to warrant separate attention. The six processes are (1) National Trends; (2) Attracting and Keeping Jobs; (3) The Politicization of Municipal Employees; (4) The Poor-Redistribution Cycle; (5) Maintaining a Non-Poor Population; and, (6) Maturing Fiscal Obligations.

What is Fiscal Strain?

Our conception of fiscal strain is an imbalance between city government spending or debt and private sector resources in the city. Fiscal strain can thus be measured using a ratio of city government spending or debt to local resources such as median family income, taxable property value, and population size. Such measures can be in the form of levels for comparisons at one time across several cities, or changes over time in one or numerous cities. Twenty-nine fiscal strain indicators have been computed and analyzed elsewhere for the Permanent Community Sample of the National Opinion Research Center (Clark, Rubin, Pettler, and Zimmermann, 1976; Clark, 1977).

One important finding from this empirical work is that fiscal strain differs considerably across cities at one point in time, as well as in change rates from 1960 to the late 1970s. New York City has much higher levels of debt and spending than most other cities, and increased spending rapidly in the 1960s, but has been cutting back since 1975. Other cities exhibit altogether different patterns. The magnitude of differences among cities leads us to focus in this paper on primarily local factors generating fiscal strain, rather than national trends which affect all cities.[1] We nevertheless begin with certain basic propositions about national trends.

* * * *

(1) National Trends

Here we include broad national changes affecting virtually all cities. The most important for urban fiscal questions are economic growth and federal assistance. Economic growth is nationally uneven in most countries, whether the economy is largely operated by the central government, privately, or mixed.

In a dynamic economy, some cities and regions prosper, and others suffer, insofar as consumer demands and technologies change and these differentially "fit" with the resources available in different urban locations. Such spatial differentiations will be discussed shortly. Here it is enough to note that national recession generally hurts municipal governments.

P1. The greater the downturn in the national economy, the greater the fiscal difficulties for cities.[2] The apparent simplicity of this idea can still be misleading. Although recession may decrease city revenues, it may also decrease certain expenditures such as police services for tourists. What matters is the marginal increase in revenues compared to expenditures due to recession. The same is true for the effects of inflation on city governments. High inflation rates were widely blamed by urban leaders as causing fiscal problems in the late 1960s. Many products that cities had to purchase (capital facilities, fuels, etc.) increased in cost faster than did municipal revenues. The situation is complicated by the high labor-intensiveness of most municipal services, and hence minimal changes in productivity compared to more technologically-dependent sectors of the economy. Growth in municipal expenditures thus translates, more than anything else, into growth in municipal employee salaries. This expenditure side of the fiscal strain equation is elaborated below. In terms of revenue, the fundamental variable mediating national economic trends and local fiscal health is the municipal revenue structure.[3]

P2. The more elastic the revenue structure of a municipal government, the more its revenues contract in time of recession. This simple economic tautology remains an important proposition for distinguishing among American cities. Boston obtains over 80 percent of its local revenues from property

taxes; New York about 50 percent; many cities in the South, like Birmingham, under 20 percent. The property tax was attacked in earlier years precisely because it was inelastic, and did not increase as rapidly as the rest of the economy.[4]

New York City moved away from reliance on the property tax in the 1960's, and thereby captured revenues from sales and income taxes and charges on local businesses. These increased with economic prosperity. However, this changed revenue structure left New York more exposed in the early 1970's recession, compared for example to Boston or other cities with less elastic revenue structures.

The city's economic base also affects reactions to economic difficulties:

P3. The more diversified a city's economic base, and the less it is composed of cyclically-sensitive industries, the less extreme are fluctuations in revenue for the municipal government in time of national recession or rapid growth. Economic diversification dampens fluctuations insofar as the different sectors of the local economy differentially lead and lag through the trough of a recession. Detroit's lack of diversification, by contrast, makes it particularly dependent on expansion or recession as experienced uniquely by the automobile industry. Still, even national economic growth remains unevenly distributed, and often involves movements of individual firms or industries (such as shoe and textile manufacturers leaving New England towns). Cities that succeed in diversifying their local economies have some degree of protection against such developments.

Similarly, some industries like steel fluctuate considerably with business cycles, while others are far more stable (cf. Vernez et al, 1977). Cities with more cyclically-sensitive industries are more open to fluctuations in municipal government revenues (unless their revenue structures avoid dependence on such industries).

Federal government grants also affect cities importantly, and although "more is better" is argued by most urban leaders when in Washington, the proposition is not altogether convincing. Simply the New York City case questions the assertion, as in 1974-75 48 percent of total expenditures for New York City were reimbursed by intergovernmental revenues, while the figure for all U.S. cities was 40 percent (cf. U.S. Census, 1976). More generally, in cross-sectional correlations and regressions for 51 cities, we found almost no significant relationships between the percentage of municipal revenues from intergovernmental transfers and the level of fiscal strain (Clark and Ferguson, 1977). Much of the econometric work on intergovernmental assistance concludes that, if anything, intergovernmental transfers stimulate more, rather than substitute for, locally-raised revenues (e.g., Oates, 1976; ACIR, 1977). In a study of six European countries, Newton et al (1979) found no relationship between urban fiscal strain and the degree to which the central government had assumed responsibility for local services. Perhaps more important for the local official than the quantity is the form of the intergovernmental assistance.

P4. <u>The more clearly defined the amount, the longer the term, and the fewer restrictions in intergovernmental assistance to cities, the less the urban fiscal strain</u>. From proposition #4, cities should suffer less fiscal strain if established formulas are used continually, as approximated by General Revenue Sharing. By contrast, fiscal strain is more likely associated with the uncertainties of categorical grants, especially those allocated via competitive bidding. New York, Boston, New Haven, and other cities that did particularly well in submitting proposals,have suffered declines in federal assistance in the early 1970s.[5] These examples illustrate both the uncertainties of competitive bidding and the effects of changing to formula grants.

Complex interactions among variables should also not lead us to omit simple verities:

P5. The weaker the fiscal condition of the municipal government, and the more extended it is in terms of debt, the greater the fiscal problems which are likely to emerge with national recession. Just as a critically ill patient risks more than a healthy person when both catch colds, so New York was more exposed than many cities in the early 1970s. A "weak fiscal condition" as in P5 is often associated with declines in jobs and population. We turn to these in the next sections.

(2) Attracting and Keeping Jobs: Maintaining the Economic Base

A sound economic base is the most commonly cited source of fiscal health, the goal of many local officials, the key criterion for many municipal credit analysts. It is simpler to document its association with fiscal strain than to explain causally / in turn, but documenting this association is at least a first step.

P6. The more stable the economic base, in terms of jobs per resident, the less the fiscal strain. In times of rapid inflation, "stable" in proposition #6 should be read as "after adjusting for inflation." This still remains imprecise, for economic growth may signal better long term prospects than stability. However, growth in jobs per resident brings changes in the tax base mix and the services the local government will be requested to deliver. It implies expansion in terms of roads, sewerage, gas, electricity and similar facilities, often funded by long term municipal debt. The few cases of municipal default since World War II have / usually occurred in small communities that became overextended in planning such growth (cf. ACIR, 1973).

What / in turn are the sources of such a strong economic base? Certain private sector characteristics seem of considerable importance:

a. low density and low land value--permitting construction of single-story assembly plants and warehouses

b. low cost of labor in the local private market

c. no unions, or at least unions ready to cooperate with new firms

d. access to major rail and road transit lines--for industry if not all local service activities

To such a basic list may be added some quasi-social and governmental variables:

e. reasonable crime rates

f. stable social and economic characteristics of the city

g. low tax burden

h. stable and cooperative local government--for rezoning, assembling land packages, help in negotiating union contracts, etc.

i. cooperative local institutions--for credit, land, labor negotiations, etc.

Still, despite the frequency of such variables as these in repeated studies (e.g., Meyer, Kain and Wohl, 1965; Perloff and Wingo, 1968; Berry and Horton, 1970; Vaughan, 1977), there are also considerable differences and interactions with type of job. The above list applies most to reasonably modern industry and many service activities; it is less adequate for specialized services like finance, advertising, publishing, law, merchandising, and entertainment which also depend on other characteristics such as higher density and physical access to specialized clients. Cities like New York have more of a comparative advantage for such specialized services than for most heavy or light industry, or more routinized services.

It is primarily the logic of variables a to i which has generated the growth of suburbs and many Sunbelt cities. In the face of such forces, many cities have simply declined dramatically—many older industrial towns of New England have lost jobs since the turn of the century. City government officials can seek to encourage the growth of local jobs and population, but the evidence to date suggests that their efforts have limited effects compared to the broader national forces. By contrast, public officials have considerable control over city government. Most adaptation of local officials to shifts in jobs and population has been through changing the activities of the local government. For example Pittsburgh, which has lost jobs and population like many other cities, has cut back its municipal labor force and held the line on municipal debt and expenditures so that it has remained much more competitive in its tax burden than Boston or New York. New York, since 1975, has been has been moving in the same direction (cf. Clark and Fuchs, 1977). Such adaptation is not easy. In older cities, the costs of maintaining an aging physical plant (roads, sewers, public transportation) are usually high. When supported by a declining population, per capita costs escalate. But adaptation is largely a problem of leadership, not of the economic base. Leadership is also central to the next section.

* * *

Organized Groups, Political Leadership, and Policy Outputs

(3) The Politicization of Municipal Employees

(4) The Poor-Redistribution Cycle

(5) Maintaining a Non-Poor Population

As the next three processes share several elements, they are partially dealt with together. However, each is summarized in a separate figure to indicate its basic elements (see Figures 1, 2 and 3).[5a]

Figures 1,2,3 about here

It is primarily on the basis of surveys of individual citizens that we distinguish three basic sectors with distinct interests in urban public policy (e.g. Hoffman and Clark, 1979; ACIR, 1979; Public Opinion, 1978-79 issues).

The Poor favor redistributive policies oriented toward themselves.

Municipal employees favor higher salaries, pensions, and other amenities for themselves.

The Non-Poor favor maintenance of basic municipal services at a level that keeps the city liveable--something hard to assess meaningfully with only fiscal output data. They favor a low tax burden. They oppose redistributive policies. This need not imply a total absence of concern for general social welfare; without some broad based public support for income redistribution, little would be accomplished. But if the preference for redistribution to the poor is stochastically distributed across the non-poor, and lower than among the poor themselves, our basic results should follow. More formally we may specify a policy congruence function as follows:

$$(1) \qquad PO_{ij_c} = -(PO_{ij_a} - PO_{ij_d})^2$$

where

$$i = \text{sector} = \begin{cases} 1 \text{ if municipal employees} \\ 2 \text{ if poor} \\ 3 \text{ if non-poor} \end{cases}$$

Figure 1. The Politicization of Municipal Employees

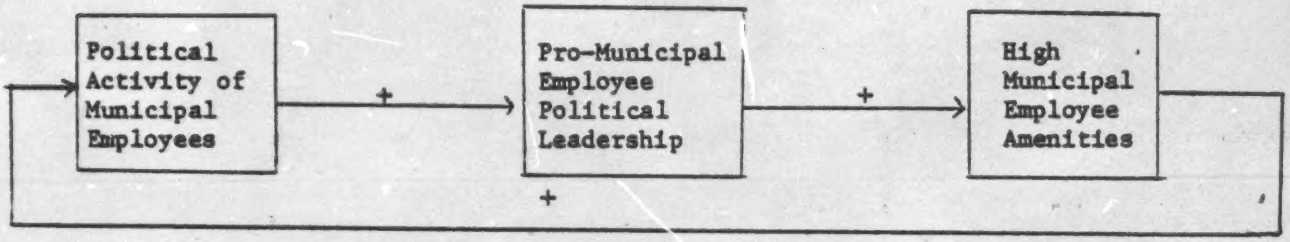


Figure 2. The Poor-Redistribution Cycle

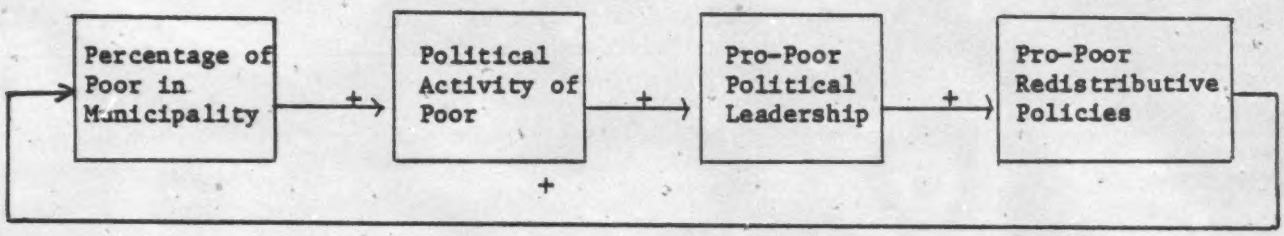
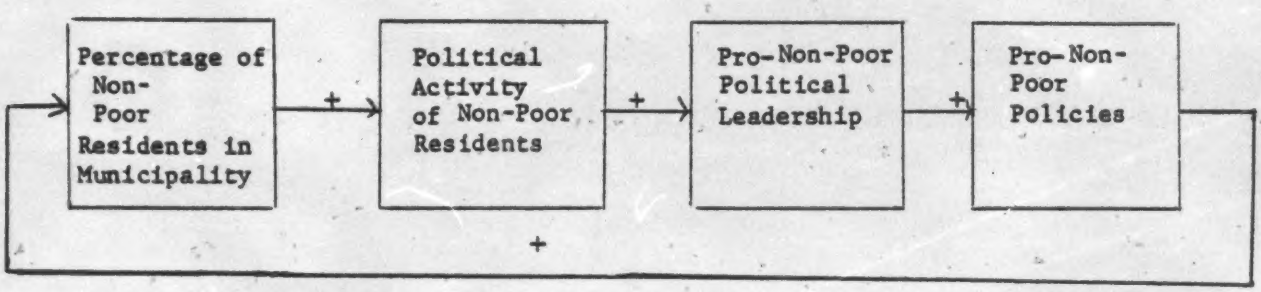


Figure 3. Maintaining a Non-Poor Population



j = policy issue in question

a = actual level of policy outputs for issue j

d = desired level of policy outputs by sector i for issue j

c = congruence of sector i's desired level with a, the actual level of policy outputs for issue j

As PO_{ij_a} comes closer to PO_{ij_d}, that is, sector i's desired level of policy output moves closer to the actual level, PO_{ij_c} increases. Conversely, as the disparity between PO_{ij_a} and PO_{ij_d} grows, the congruence term PO_{ij_c} decreases; the policy may thus be said to be less congruent with the preferences of sector i.[6]

The basic issues desired by each sector are as follows:

$$PO_{1j_d} = \max (A)$$

$$PO_{2j_d} = \max (R)$$

$$PO_{3j_d} = \max (MS, 1/TB)$$

where

A = amenities for municipal employees

R = redistributive policies oriented toward the poor

MS = basic municipal services

TB = tax burden in the municipality

If we define PR_i as the proportion of the community population included in sector i, then a basic proposition is

$$(2) \qquad PO_{ij_c} = f(PR_i)$$

That is, P7. the larger the proportion of the community population included in sector i, the more congruent will policy outputs be with sector i's preferences. (Here and in equations below, coefficients such as f in equation 2 indicate a positive hypothesized relationship.)

The relative size of each sector is doubtless important in explaining policy outputs. But converting the number of sector members into policy outputs is facilitated by resources such as organization. If we define O_i as the degree of organization of sector i (such as membership per capita in a leading sector-related organization), and O_o as the degree of organization of other sectors in the community, then

(3) $PO_{ij_c} = f(O_i/O_o)$

That is, P8. policies should be more congruent with a sector's preferences if it is more highly organized than other sectors of the community.

P.8 is weakened if there are conflicts among different organizations within a sector. Such potential intra-sector differentiation is considered in P9, perhaps best introduced verbally, and then more formally. P9. The fewer the lines of cleavage within a sector, relative to other sectors, the more policy outputs are consistent with the sector's preferences. For example, if all poor persons are black, and all blacks are poor, they should be easier to organize. Let C_k be a social characteristic k of a community population of significance for its mobilization (e.g., black racial identity). Let P_k be those members of the community population that share k (i.e., black residents). Then

(4) $PS_{ik} = S_i \cap P_k$ = persons in S_i with characteristic k

(5) $M_i = \frac{PS_{ik}}{S_i}$ = proportion of sector i with k

(6) $Q_k = P_k \cap \bar{S}_i$ = persons with k not in S_i

(7) $T_k = \frac{Q_k}{P_k}$ = proportion of persons with k not in S_i

The idea of cross-cutting cleavages for S_i on characteristic k may then be expressed as

(8) $XC_{S_{ik}} = -f(M_i) + g(T_k)$

Such cleavages should be greater if k is shared by a smaller proportion of the sector (M_i) and a larger proportion of the rest of the population (T_k). When $XC_{S_{ik}} = 0$, k is found only in S_i. If $XC_{S_{ok}}$ is defined as the cross-cutting cleavages for sectors other than S_i, we may restate P9 as

(9) $PO_{ij_c} = f(XC_{S_{ok}} / XC_{S_{ik}})$

Consider now empirical patterns of organization for our three sectors. The poor are a sector which decades of social organizers and theorists have sought to activate, in U.S. cities with remarkably little success. Efforts which have succeeded have generally coalesced around some specific characteristic shared by the poor. The most important example since the 1960s is race (cf. Greenberg, 1974; Coleman, 1971). Building on the momentum of national civil rights organizations, several black urban political groups succeeded in organizing blacks to register, vote, demonstrate, and boycott--in Cleveland, Gary, Atlanta, and Birmingham with notable political impact (e.g., Levine, 1974; Nelson and Meranto, 1977). Although survey evidence indicates that the poor generally share preferences for more redistributive public spending, it has been poor blacks who have been most successful in organizing as a sector and making an impact on the local political process.

Municipal employees illustrate a much higher level of organization. Although they have had professional associations for decades, municipal employees unionized in large numbers only in the late 1960s, inspired in part by the success of blacks and the ability of unions in cities like New York to win major wage increases (cf. Wellington and Winter, 1971; Chickering, 1976). The shared characteristic k in this example is dependence on a common employer whose leaders in turn visibly depend on groups who have brought them to office. And indeed, in cities where municipal employees have succeeded in reaching higher levels of organization, they have also obtained more amenities (cf. Ehrenberg and Goldstein, 1975; Bahl, Gustely, and Wasylenko, 1978; Clark and Ferguson, 1978).

By contrast, efforts to organize the non-poor have been minimally successful. Obviously subsectors of the non-poor are highly organized--in special interest groups like neighbothood associations, environmental groups, etc. But the critical point for urban fiscal questions is that such organizations are primarily concerned with affecting specific policies which usually increase expenditures. It is the normally "silent majority" of the vast non-poor sector which prefers lower taxes, even while its individual members prefer more spending on matters of special interest to them. Although the fiscal conservatism of this sector has been clear in survey data for years (in the sources cited above), it was generally ignored until 1978 when Proposition 13 gave expression to these concerns. In principle such concerns could be translated into fiscal policy through organization as in the above propositions. However given the large number of votes but the ephemeral character of most broad-based organizations, political leaders often play an especially important role in capturing such fiscally conservative preferences.

Given the opposition between policies favored by the non-poor and the two other sectors, we could also include arrows connecting the non-poor process in Figure 3 to the two others. Such "oppositional feedback" clearly limits the potential of the poor and municipal employee processes to find an "equilibrium" of spending at positive infinity, as do the anticipatory calculations of political leaders and organized group representatives concerning the degree to which the non-poor will remain quiescent. It is only when such calculations fail that "taxpayers' revolts" emerge.

Figures 1 to 3 indicate that policies are effected only if the political leadership is persuaded to act. Although changes in the socio-economic base (e.g., percentage black) provide the underlying dynamic for many such changes, socio-economic changes are not automatically translated into policy changes. Typically policy changes are the result of a new sector or coalition bringing pressure to bear on the political leadership, or similarly a new mayor or city council member seizing the opportunity to forge a new base of popular support. In such instances, the sectors that previously benefited from governmental activities are likely to resist actively the new leadership initiatives. Such confrontations between blacks and Irish, Italian, and related white ethnic groups have been common in American cities since the early 1960's. In many suburban areas, by contrast, conflicts often arise between older residents with preferences for low spending patterns and newer residents who prefer more services.

A dynamic political leader can play a critical role in articulating the concerns of a new sector, or in the case of many cities in the 1970s, in helping adapt expansive citizen preferences to the austerities of available resources. Mayors Richard Daley in Chicago, Peter Flaherty in Pittsburgh, and Richard Hatcher in Gary have all played important roles in these respects.

These examples can be modeled using a notation similar to that developed above.

$$(10) \qquad L_{pj} = \frac{L_{nj} - L_{rj}}{L_{nj}}$$

where

L_{nj} = number of political leaders (e.g., city council members) acting on issue j

L_{rj} = number of leaders opposed to issue j

L_{pj} = proportion of leaders favoring issue j

Then we may state P 10:

$$(11) \qquad PO_{ij_c} = f(L_{pj})$$

sector i's interests on
P 10. The larger the proportion of political leaders favoring an issue, the more likely it is to be implemented.

Coalitions among leaders and sectors are a complex topic that we mention only briefly.[7] We consider the major leadership configurations likely in terms of the three basic sectors in this analysis. These appear in Table 1. An equation predicting fiscal strain could be developed using a general linear, additive model without distorting most of the leadership effects

Table 1 about here

in Table 1. The major exceptions are L_2 and L_3. Although the poor and non-poor are not likely partners for leadership, their relative importance is likely to interact, as shown in the following table:

Hypothesized Coefficient of $d(L_p)(L_{np})$ in equation 12	Dominant Actor Leadership Score	
	Poor	Non-Poor
-	L	H
0	M	M
+	H	L

The second interaction term in eq. 12 is for the poor-municipal employees configuration. Political involvement of these two sectors is likely to interact to increase spending. A partial model for fiscal strain in terms of leadership patterns involving these sectors might thus read:

Table 1. Likely Outputs of Basic Leadership Configurations

Leadership	Dominant Actors	Policy Outputs Likely R	A	MS	TB	Comment
L_1	p + me	H	H	M-H	H	Most expensive, illustrated by NYC
L_2	p + np	M	L	M	M	Unlikely
L_3	np + me	L	H	H	M	Example?
L_4	np	L	L	L	L	Least fiscal strain, Waco?
L_5	me	L	H	M	M-H	Unlikely
L_6	p	H	L	M	M-H	Unlikely
L_7	p + np + me	M	M	M	M	General compromise, approximated by Chicago

where the dominant actors are

p = poor

np = non-poor

me = municipal employees

and H, M, and L are high, medium, and low spending in the areas of R = poor-oriented redistributive activities, A = amenities for municipal employees, MS = basic municipal services, and TB = tax burden.

$$(12) \quad GE = aL_p + bL_{me} - cL_{np} + d(L_p)(L_{np}) + e(L_p)(L_{me})$$

where a, b, c, and d are coefficients to be estimated, and GE is an indicator of overall general expenditures for the city.

The degree to which preferences of political leaders are translated into public policy depends in good part on the resources available to them.

All are likely to interact and to effect P 10 in the same direction:

P 11. The greater the resources of political leaders, the greater their ability to implement their preferences.

$$(13) \quad PO_{ij_c} = L_{pj}^{f} \; RES^{g}$$

where

RES = resources of political leaders

and g is a coefficient to be estimated. Examples of leaders' resources are legal authority, informal power, networks of social contacts, and the like, empirical measures of which are analyzed in Clark and Ferguson (1977, 1979), where we find indeed that a mayoral power measure enhances the impact of mayor's preferences on fiscal policy.

The various determinants of PO_{ij_c} may now be brought together in a single statement summarizing P7 through P11.

P 12. The larger the proportion of community residents included in sector i, and the more highly organized is sector i, the fewer other lines of cleavage cross-cut the sectoral cleavages, the more leaders favor sector i's interests, and the more resources available to the political leadership, the more sector i's preferences will be reflected in local public policies. Or more formally:

$$(14) \quad PO_{ij_c} = PR_i^a (O_i/O_o)^b (XC_{S_{ok}}/XC_{S_{ik}})^c (L_{pj}\ RES)^d$$

where a through d are coefficients to be estimated.[8]

Thus far the propositions have addressed the basic horizontal linkages depicted in Figures 1 to 3. Consider now the feedback arrows. The general idea in each case is: P 13. The higher a policy output favorable to a given sector, and the greater its increase in a given time period, the greater the expansion of that sector in the next time period.[9] Clearly many other variables affect residential choice, but with our attention focused on the dynamics of these public policy issues, other variables are here summarized simply as OV. Obviously there are dozens of "other variables" which may play quite significant roles in affecting residential choice, but we make no attempt to review them here.

Three increasingly complex simultaneous equation models outline the feedback processes. The simplest is a one-time, non-lagged model

$$(15) \quad PR_i = PO_{ij_c}^f OV^g$$

$$PO_{ij_c} = PR_i^h OV^q$$

This might be estimated with a cross-sectional analysis of the level of policy outputs compared across cities. A slight refinement would be to lag the policy output for a period of time (perhaps five years) during which it could affect residential choices, and they in turn affect subsequent policy outputs:

$$(16) \quad PR_{it} = PO^{f}_{ij_{c(t-1)}} OV^{g}$$

$$PO_{ij_{ct}} = PR^{h}_{i(t-1)} OV^{q}$$

If one considers changes in sector size over time, however, this is likely to be affected more by changes in the policy outputs than the level of policy outputs, as in

$$(17) \quad PR_{it} - PR_{i(t-1)} = [PO_{ij_{c(t-1)}} - PO_{ij_{c(t-2)}}]^{f} OV^{g}$$

$$PO_{ij_{ct}} = PR^{h}_{i(t-1)} OV^{q}$$

A still more refined model of change in sector size includes both the past level and change in policy outputs:

$$(18) \quad PR_{it} - PR_{i(t-1)} = PO^{f}_{ij_{c(t-1)}} [PO_{ij_{c(t-1)}} - PO_{ij_{c(t-2)}}]^{g} OV^{h}$$

$$PO_{ij_{ct}} = PR^{q}_{i(t-1)} OV^{r}$$

(6) Maturing Fiscal Obligations

Maturing fiscal obligations are contracted by past local officials, but their burdens fall on present and future officials and citizens. The most obvious examples are debt payments and pension liabilities. Indeed, some observers have suggested that it is simply good politics for municipal leaders to deliver immediate benefits to their constituents, and to postpone as many costs as legally possible. The basic idea here may be quite simply stated:

P 14. The larger the maturing fiscal obligations as a proportion of municipal revenues, the greater the fiscal strain. That is,

(19) $FS = f(MFO/GR)$

where

FS = fiscal strain

MFO = maturing fiscal obligations

GR = general revenue

This implies a cross-sectional, or at least one-time perspective. A refocus on marginal changes into the future involving the same basic process suggests: P 15. The greater the increase in maturing fiscal obligations as a proportion of municipal revenues, the greater the fiscal strain. Or restated:

(20) $FS_t = f(MFO_t - MFO_{t-n}/GR_t - GR_{t-n})$

where n = number of years before obligations mature

Consider capital construction projects such as schools, roads, and parks, which cities finance in different ways, varying in the degree to which they will constitute "maturing fiscal obligations." The fewest obligations are passed on to the future if the project is financed from current revenues. Numerous capital projects are funded in this manner by American cities, although the exact proportion is difficult to compare across cities given the reporting formats of different cities and the U.S. Census (in the City Government Finances series).[10]

Payment for a facility at the same approximate time that it is constructed is consistent with the public finance principle of "pay-as-you acquire" (cf. Moak, 1970:192-95). The second basic alternative principle is "pay-as-you-use." Here the facility is paid for over the period of its

approximate useful life, such as 20 years. One can reasonably argue that some portion of the costs of a facility should be shared by future citizens if they are to benefit from capital facilities. Our concern is not to assess the appropriateness of such funding vehicles, but simply to consider them in terms of the degree to which they constitute obligations which in turn can create fiscal strain in future years. One useful indicator would be the proportion of capital projects funded from current revenues. Another is the schedule of debt payments (including interest and repayment of principal) which the city must meet in future years. These indicators could be used to measure the MFO terms in Propositions 14 and 15. There may be some interaction effects involving the size and type of project; debt is more likely for projects which are large and for purposes generally acceptable to the debt market.

Under continual pressure from political leaders, municipal finance directors have developed numerous procedures to speed up revenue collection and postpone expenditures. A recently debated case is that of Philadelphia, where in 1975 Mayor Rizzo, up for reelection, pressed his finance director for more expenditure without alienating voters through a tax increase (Livingston, 1976). Lennox Moak, Philadelphia's highly respected finance director, was concerned that a deficit would raise the already high interest costs for the city. They decided to change several accounting procedures (from cash to accrual basis, estimating questionable revenues, etc.) which generated a substantial (one-time) surplus of cash for the 1975 fiscal year.

The surplus was announced in "tombstone" advertisements in the New York Times and Wall Street Journal, which did not mention the accounting procedure changes. Apparently the advertisements initially helped lower the cost of borrowing for the city. However, before long the accounting procedure changes became known as the source of the surplus. Philadelphia was widely criticized by the investment community and the next year was forced to impose a 30 percent property tax increase, and met increasing difficulties in selling bonds.

This example illustrates the enormous pressures on some local finance officials to generate immediate cash flows and to postpone tax burdens, even to the extent of pursuing policies that hurt the city in the very near future. And it was not only the city finances that suffered. Mayor Rizzo suffered politically with the voters, and Finance Director Moak became the subject of a highly publicized SEC investigation for fraud, which in turn generated numerous lawsuits and a movement by many finance directors to vote out Moak from his position as president of the Municipal Finance Officers Association.

New York and Philadelphia illustrate the same basic point in their pension funding arrangements. Mayor Rizzo was elected mayor as former police chief, and some observers felt that his questionable fiscal efforts were in good part due to his concern to improve the amenities of Philadelphia police officers. Although John Lindsay was by no means elected to represent municipal workers, he too ended by granting benefits to municipal employees that were apparently designed to be hidden from local citizens. In New York,

salaries per se for most municipal employees (i.e., police, fire fighters and teachers) were broadly similar to those in many other cities in the late 1960's and early 70's. The big increases were granted in hard-to-see benefits, particularly pension benefits (Clark and Fuchs, 1977). One should recall that until the mid-1970's in most cities pensions remained a highly esoteric area relegated to a few specialists. Only since revelations about New York--and increasingly about other cities--have the press and general citizenry begun to become aroused sufficiently to make pension settlements a more visible part of the municipal fiscal agenda.

But if the concern has increased, the data remain woefully inadequate. Very few cities have released precise data concerning specific benefit packages for fringes and pensions, levels of funding of pension plans, numbers of workers in various benefit categories, and actuarial estimates of worker retirement patterns (cf. Jump and Bahl, 1974; Davidson et al., 1977). Only one fourth of 46 cities recently studied published actuarial tables with their bond prospectuses, and very few of these reported the specific actuarial assumptions on which the tables were based (Coopers & Lybrand and the University of Michigan, 1977), although this is gradually improving (Ernst and Whinney, 1979).

Conclusion and Policy Implications

The basic conclusion of this analysis is that local officials and others concerned with urban fiscal strain should not look for a single cause, or waste undue effort debating "the Sunbelt" versus "fiscal mismanagement" as general sources of urban difficulty. Six important and distinct sources of urban fiscal difficulty are isolated above, each with its own set of sources and solutions. If a city like New York suffers from most of these, this is by no means the case elsewhere. And even if a single

city suffers from all six problems, isolating the dynamics of each process points to the specificity of each in terms of solutions as well. Different aspects of these issues can serve as important research sites for continuing work on public opinion, voluntary associations, political mobilization, coalition theory, and other traditions.

FOOTNOTES

1. In this respect our approach obviously complements those of others who have focused primarily on national phenomena, e.g., Bell (1974); O'Connor (1973); Friedland, Piven, and Alford (1977).
2. P1 designates proposition 1.
3. Empirical work on the effects of recession and inflation on city government is very limited as almost no studies have compared the marginal effects on both revenues and expenditures. One of the few that has suggests that net revenue losses from these national trends are small (about 5 percent each for the 1975 recession). ACIR (1979a).
4. Netzer (1966) presents the basic argument about inelasiticity of the property tax. Although Metropolitan Studies Program (1975) and Peterson (1976:53) point out that housing values often increased as rapidly as sales about 1970, property taxes are more politically difficult to increase than others, and they are less likely to decline in recession than sales taxes and many charges.
5. The pre- and post-1973 rates of average annual increases due to non-local sources is striking:

NYC, Percentage of Revenue Growth From:

Period	Local Revenue	State & Federal Aid	Net Annual Borrowing
1965-73	37%	55%	8%
1973-75	22%	8%	70%

Source: Peterson (1976:64).

5a. Our formulations in this section bring together ideas from four normally separate traditions: citizen preference models (e.g. Riker and Ordeshook, 1973); group theory and work on voluntary associations (e.g. Dahl, 1961;

Coleman, 1957; Gamson, 1975); studies of political leadership (e.g. Dahl, 1971: chap. 17); and residential choice analyses (e.g. Tiebout, 1956; Hirschman, 1970; Frey, 1979).

6. The policy congruence function is very similar to the sort of loss function analyzed by Riker and Ordeshook (1973: 307ff.) and others in the public choice tradition. It is given a negative sign in eq. 1 so that a larger value implies greater policy congruence, to facilitate subsequent exposition.

7. Leadership configuration is a term we prefer to coalitions as it does not imply binding commitments concerning present and future policy outputs among leadership members. Measures of leaders' policy preferences are available from NORC-PCS surveys based on such items as would you prefer more, less, or the same amount of spending in 11 different policy areas, and do you favor or oppose a series of public policies (e.g. municipal employee unions).

8. This sort of multiplicative equation, which can be estimated using a log-log functional form, seems most consistent with the substantive relationships among the variables. That is, they all depend considerably on the relative size of the sector, and then in turn reinforce each other.

9. In equations 15, 16, and 17 where i = municipal employees, the PR_i should be interpreted as the organization or politicization of municipal employees, rather than their number. This is because for poor or non-poor residents sector size is determined by migration decisions of sector members. By contrast the number of municipal employees is mainly a decision of the city administration, while their political organization is mainly their decision. If such political organization succeeds in increasing amenities above those for comparable levels found in other cities or in the private

sector in the same city, politicization of municipal employees is likely to increase further: (1) to prevent their benefits from being lost; (2) to restrict the entry of new workers into the municipal labor force (unnecessary if amenities remain at market levels); (3) to help influence the political leadership to maintain more general policies that will keep municipal employees an important element of the leadership configuration. Clearly policies 1, 2, and 3 feed back on each other and on municipal employee amenities in a continuing manner. In terms of the logic of the process, policies 1, 2, and 3 will become increasingly important as the distance of municipal amenities from comparable market alternatives increases. And as amenities fall back toward market levels, politicization should decrease.

10. This is because monies received from borrowing are normally placed in a separate fund and may be paid out only over several years because of delays in construction (Lynn and Freeman, 1974 and NCGA, 1968). Especially as debt issuings are often for several combined projects, it is difficult to match issuings with specific capital construction expenditures.

REFERENCES

Advisory Commission in Intergovernmental Relations. 1977. Federal Grants: Their Effects on State-Local Expenditures, Employment Levels, Wage Rates. Washington, D.C.: USGPO. ACIR Report A-61.

_____. 1979. Changing Public Attitudes on Governments and Taxes. Washington, D.C.: ACIR.

_____. 1979a. State-Local Finances in Recession and Inflation. Washington, D.C.: ACIR. Report A-70.

Bahl, Roy W. and Bernard Jump. 1974. "The Budgetary Implications of Rising Employee Retirement System Costs." National Tax Journal, 27 (September): 479-90.

Bahl, Roy W., Richard D. Gustely, and Michael J. Wasylenko. 1978. "The Determinants of Local Government Police Expenditures: A Public Employment Approach." National Tax Journal 31 (March):67-80.

Bell, Daniel. 1974. "The Public Household: on 'Fiscal Sociology' and the Liberal Society." The Public Interest 37 (Fall): 29-68.

Berry, Brian J.L. and Frank E. Horton, eds. 1973. Geographic Perspectives on Urban Systems. Englewood Cliffs, N.J.: Prentice-Hall.

Boston Globe. 1977. Financial Plight of Bay State Cities. January 11. (A special Globe report.)

Chickering, A. Lawrence, ed. 1976. Public Employee Unions. San Francisco: Institute for Contemporary Studies.

Clark, Terry Nichols. 1976. Cities Differ--But How and Why? Washington, D.C.: Department of Housing and Urban Development.

_____. 1977. "Fiscal Management of American Cities: Funds Flow Indicators." Journal of Accounting Research 15: 54-106.

Clark, Terry Nichols and Ester Fuchs. 1977. New York City in Comparative Perspective." Pp. 295-311 in Temporary Commission on City Finances, The City in Transition: Prospects and Policies for New York--The Final Report of the Temporary Commission on City Finances. New York: Praeger.

Clark, Terry Nichols and Lorna C. Ferguson. 1979. Political Leadership and Urban Fiscal Strain. Book ms.

Clark, Terry Nichols, Irene Sharp Rubin, Lynne C. Pettler, Erwin Zimmermann. 1976. How Many New Yorks?--The New York Fiscal Crisis in Comparative Perspective. Chicago: Comparative Study of Community Decision-Making, Research Report #72. University of Chicago.

Clark, Terry Nichols and Lorna C. Ferguson. 1977. "Local Autonomy and Fiscal Performance." Background paper for conference of Section on the Community, American Sociological ASsociation, University of Chicago, March 18-19.

Coleman, James S. 1957. Community Conflict. Glencoe, Ill.: Free Press.

_____. 1971. Resources for Social Change: Race in the United States. New York: Wiley-Interscience.

Coopers and Lybrand and The University of Michigan. 1976. Financial Disclosure Practices of the American Cities. Ann Arbor, Mich.

Dahl, Robert A. 1961. Who Governs? New Haven: Yale University Press.

Davidson, Sidney et al. 1977. Financial Reporting by State and Local Government Units. Chicago: Center for Management of Public and Nonprofit Enterprise. Graduate School of Business, University of Chicago.

Ehrenberg, Ronald G. and Gerald S. Goldstein. 1976. "A Model of Public Sector Wage Determination." Journal of Urban Economics 2: 223-245.

Ernst and Whinney. 1979. How Cities Can Improve Their Financial Reporting. New York: Ernst and Whinney.

Frey, William H. 1979. "Central City White Flight: Racial and Nonracial Causes." American Sociological Review 44 (June): 425-448.

Friedland, Roger, Frances Fox Piven, and Robert R. Alford. 1977. "Political Conflict, Urban Structure, and the Fiscal Crisis." Presented to annual meeting of American Sociological Association, September 5-9. Chicago.

Gamson, William. 1975. The Strategy of Social Protest. Homewood, Ill.: Dorsey.

Greenberg, Stanley. 1974. Politics and Poverty. New York: Wiley-Interscience.

Hirschman, Albert O. 1970. Exit, Voice, and Loyalty. Cambridge: Harvard University Press.

Hoffman, Wayne Lee and Terry Nichols Clark. 1979. "Citizen Preferences and Urban Policy Types." Pp. ------- in Urban Affairs Annual Reviews. Beverly Hills and London: Sage Publications.

Levine, Charles H. 1974. Racial Conflict and the American Mayor. Lexington: D.C. Heath-Lexington Books.

Livingston, J.A. 1976. "The Lennox Moak Solution." The (Philadelphia) Sunday Inquirer. May 9.

Lynn, Edward S. and Robert J. Freeman. 1974. Fund Accounting. Englewood Cliffs, N.J.: Prentice-Hall.

Metropolitan Studies Program of the Maxwell School, Syracuse University. 1975. The Fiscal Implications of Inflation: A Study of Six Local Governments. Syracuse, NY.: Syracuse University.

Meyer, John R., John F. Kain, and Martin Wohl. 1965. The Urban Transportation Problem. Cambridge, Mass.: Harvard University Press.

Moak, Lennox L. 1970. Administration of Local Government Debt. Chicago: Municipal Finance Officers Association.

National Committee on Governmental Accounting. 1968. Governmental Accounting, Auditing, and Financial Reporting. Chicago: Municipal Finance Officers Association.

Nelson, William E., Jr. and Philip J. Meranto. 1977. Electing Black Mayors. Columbus: Ohio State University Press.

Netzer, Dick. 1966. The Economics of the Property Tax. Washington, D.C.: Brookings.

Newton, Ken. 1979. Balancing the Budget. London: Sage Publications.

Oates, Wallace E. ed. 1975. Financing the New Federalism. Baltimore and London: Johns Hopkins University Press.

O'Connor, James. 1973. The Fiscal Crisis of the State. New York: St. Martin's Press.

Perloff, Harvey S. and Lowdon Wingo, eds. 1968. Issues in Urban Economics. Baltimore: Johns Hopkins Press.

Peterson, George E. 1976. "Finance." Chapter 2 in William Gorham and Nathan Glazer, eds. The Urban Predicament. Washington, D.C.: The Urban Institute.: 35-118.

Public Opinion. 1978 and 1979.

Riker, William H. and Peter C. Ordeshook. 1973. An Introduction to Positive Political Theory. Englewood Cliffs: Prentice-Hall.

Tiebout, Charles M. 1956. "A Pure Theory of Local Public Expenditure." Journal of Political Economy 64 (October): 416-24.

Vaughan, Roger J. 1977. The Urban Impacts of Federal Policies: Vol. 2, Economic Development. Santa Monica: RAND. Report R-2028-KC/RC.

Vernez, Georges, Roger Vaughan, Burke Burright, Sinclair Coleman. 1977. Rectional Cycles and Employment Effects of Public Works Investments. Santa Monica: RAND. Report R-2052-EDA.

U.S. Bureau of the Census. 1976. City Government Finances in 1974-75. Series GF75 No. 4. Washington, D.C.: USGPO.

Wellington, Harry H. and Ralph K. Winter. 1971. The Unions and the Cities. Washington, D.C.: Brookings Institution.